

REMARKS

Claims 10-18 were examined in the Office Action mailed February 14, 2008. The claims stand rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 5,633,494 to Danisch ("Danisch").

The Applicant has amended independent claim 10 to incorporate the limitations of its dependent claim 15, and have added new claims 19-27, directed to a method of determining an internal tire pressure. A conforming amendment cancelling claim 15, without prejudice to the subject matter therein, has also been made.

As amended, claim 10 now recites a tire pressure determination apparatus which includes the use of optical fibers located within a tire to detect the extent and shape of tire deflection, and tire temperature sensors within the tire which provide an indication of the amount of flexing work in the tire. Together, the detected changes in light transmission in the optical fiber due to stresses in the fiber as the tire deforms, and the detected tire temperature (an indication of tire flex work) are used by the evaluation and computer unit to provide an indication of internal tire pressure.

With regard to the new claims 19-27, these claims are directed to a method of determining internal tire pressure using an optical fiber (independent claim 19), and the combination of an optical fiber and a tire temperature sensor (claim 25).

The Danish reference discloses only the concept of using an optical fiber to measure bending stresses. Danisch Abstract. As to the portion of this reference

cited to support the pending rejection (2:35-68), Danisch provides literally nothing more than a listing of applications where mechanical strain gauges may be replaced by an optical fiber. At the bottom of this section (which extends to 3:17), there is only the briefest mention of tires, where one of the listed examples is “measuring the deflections of tire treads.” Danisch at 2:66. As to the pending apparatus claims, Danisch contains no disclosure of the combination of a tire temperature sensor with an optical fiber sensor, and thus does not disclose the invention recited in amended claim 10. Further, Danisch’s reference to measuring tire tread deflection does not provide any teaching or suggestion for the present invention’s novel use of an optical fiber to provide an indication of internal tire pressure, either with an optical fiber alone (new claim 19) or in combination with a tire temperature sensor (new claim 25). Accordingly, the Applicant respectfully requests reconsideration and withdrawal of the pending §102(b) rejection.

CONCLUSION

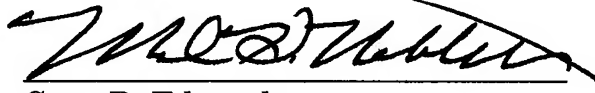
In view of the foregoing remarks, the Applicants respectfully submit that claims 10-14 and 16-27 are in condition for allowance. Early and favorable consideration, and issuance of a Notice of Allowance for these claims is respectfully requested.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #095309.58084US).

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Respectfully submitted,



Gary R. Edwards
Registration No. 31,824
Mark H. Neblett
Registration No. 42,028

CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844